$$\frac{P_1}{\rho} + \frac{u_1^2}{2} + gh_1 = \frac{P_2}{\rho} + \frac{u_2^2}{2} + gh_2$$

What pressure difference is necessary to make sure system remains flowing?

Here, $u_1 = u_2$

$$P_1 - P_2 = \Delta P = \rho g(h_2 - h_1)$$

$\rho g(h_2 - h_1)$ is the same as the pressure you measure in cm H_2O

Fig. 22